Series [123(45)].

One specimen of hue 13"OY-O, normal, and one normal of hue 15"Y-O.

Series 123(45).

13"OY-O, normal 2 specimens. 17"O-Y, f 2 specimens. b 3 specimens. 21"O-YY, normal 7 specimens.

Series 12345.

One specimen of normal, hue of 21"O-YY.

Series 12345.

17"O-Y, d 2 specimens. b 9 specimens. 21"O-YY, normal 75 specimens.

Summary.—It would be a fatal mistake to draw any conclusions upon such a study as this. This paper, however, points a way to the elimination of the taxonomic absurdities that have been applied to the various color phases within one species. Instead of trying to apply the principles of specific nomenclature to the field of color, we have applied the color nomenclature. This in itself, if it bears fruit of further study, is sufficient excuse for our time and labor.

INVERTEBRATE REMAINS DUG FROM KITCHEN MIDDENS OF AN OLD ALEUT STONE AGE VILLAGE NEAR DUTCH HARBOR, ALASKA

BY WALTER J. EYERDAM

While engaged in a botanical survey of the Aleutian Islands during the Spring and Summer of 1932, the author and his colleague, Dr. Hulten, curator of the Botanical Museum of Lund, Sweden, found a number of old stone age village sites on some of the islands.

Such evidence of a former culture were noted on the Alaska Peninsula, Unimak, Amoknak, Unalaska, Kagamil, Amlia and Atka Islands. Nearly every large island has been the home of a numerous population in former times. There are large and extensive ancient village sites on

Kagamil Island in the Four Mountain group and on Amlia Island, which probably have never been dug into by the archaeologists' spade. Neither of these islands is now inhabited except by occasional native winter trappers.

The site of a stone age village in the Aleutians can generally be recognized quite easily in the Spring and Summer by the predominating presence of two perennial plants. The most conspicuous of these is *Heraclium lanatum*, the wild rhubard or putschka of the Russians. The other one is the deadly poisonous monkshood, *Aconitum kamtschaticum*, the powdered tubers of which were formerly used to poison arrows. The Ainus of northern Japan still use this plant for that purpose. The Kamchadals also did the same in the early days of Russian occupation.

Ten days were spent during the month of May, 1932, at digging in a stone age village on Amoknak Island, about a quarter of a mile from Dutch Harbor. The exact spot is between the spruce grove and the sea.

About 200 artifacts and implements of various kinds were collected. All of these were made of bone and stone and only one specimen, a kind of awl, seemed to be of ivory.

The workmanship on most of the artifacts is crude and very simple, with almost no attempt at decoration.

A list of all forms of animals remains found in these kitchen middens on Amoknak Island will appear in the "Murrelet" in November, published by the North West Bird and Mammal Society, University of Washington, Seattle, Wash.

Following is a list of Echinodermata and Mollusca found in the kitchen middens.

Two Echinodermata were found, Strongylocentrotus franciscana, a few, and Strongylocentrotus drobachiensis, very common, and an important food of the old Aleuts.

MOLLUSCA: All species not otherwise noted were common or very common.

Pelecypoda

Saxidomus giganteus Desh. Paphia staminea Conr. Pecten islandicus Müller.

Few.

Pododesmus (Monia) macrochisma Desh.

Mytilus edulis Linn. Modiolus modiolus L.

Entodesma saxicola

Baird. Few.

Mytilus californianus Conr.

Few.

Cardium corbis Martyn.

Cardium californiense Desh.
Serripes groenlandicus

Gmelin. Few.

Macoma middendorffii Dall. Macoma inquinata Desh.

Few.

Tellina lutea Gray. Few. Siliqua patula Dixon. Few. Spisula polynyma alaskana Dall.

Mya truncata L.

Mya intermedia Dall. Saxicava arctica L.

Gastropoda

Beringius crebricostatus
Dall. Few.
Chrysodomus liratus
Martyn. Few.
Acmaea cassis Esch.
Acmaea c. pelta Esch.
Acmaea scutum Esch.
Acmaea s. patina Esch.
Acmaea s. pintadina Gould.
Acmaea digitalis Esch.

Natica aleutica Dall.
Littorina grandis Dall.
Littorina sitchana Phil.
Mopalia ciliata wossnessenskii Midd. Few.
Mopalia muscosa Gould?
Few.
Katherina tunicata Wood.
Cryptochiton stelleri Midd.
Rare.

I was able to identify 19 pelecypoda, 11 gastropoda and 4 amphineura or 34 species of shells. These represent nearly all of the more or less common shells which can be found in the vicinity of Dutch Harbor and Unalaska with the exception of very small forms and the extremely common species *Argobuccinum oregonense* Redfield, a rather large snail, and the several species of *Thais* which abound. The old Aleuts seemed to have been very indiscriminate in their choice of animal food, but *Argobuccinum* and *Thais* are too bitter to eat.

The present day Aleuts eat practically the same animals

as their ancestors did with the addition of imported food, but they are rather particular on the whole, because they have become civilized and have more choice. Nearly every kind of mollusk over half an inch was food for the old Aleuts. They were mostly eaten raw.

These old middens were in two layers showing an ancient and a more modern culture. In the oldest layer which was about 3 feet thick there were mostly clam shells and fish bones and almost no artifacts while in the more recent layer there were many remains of large marine animals and many artifacts of stone and bone.

TWO NEW CINGULAS FROM ALASKA

BY G. WILLETT

CINGULA EYERDAMI, new species (Pl. 8, fig. 9).

Shell elongate-ovate, grayish, except for the nuclear whorls, which are dirty white. Whorls rounded, appressed at the summit. Suture strongly constricted. Base well rounded, narrowly umbilicated. Aperture rounded anteriorly, angled posteriorly. Post-nuclear whorls and base smooth to the naked eye, but under a strong lens show very faint, fine spiral striations.

The type, No. 1037 collection Los Angeles Museum, with numerous additional specimens, were collected by Walter J. Eyerdam on Elrington Island, Alaska, and were sent to A. M. Strong of Los Angeles. The type has five whorls, and measures in millimeters: Length, 2.3; diam., 1.2. Paratypes in collections of A. M. Strong and the writer.

This species is similar in general outline to *Cingula aleutica* Dall, but differs from it in much smaller size, posterior angulation of aperture, and presence of spiral striations.

CINGULA FORRESTERENSIS, new species (Pl. 8, fig. 8).

Shell elongate-conic, white. Post-nuclear whorls appressed at the summit, moderately rounded, finely spirally striated. Last whorl elongated, with very narrow umbilical chink. Aperture rounded anteriorly, angled posteriorly.